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ABSTRACT

This curriculum guide outlines Prince George's County (MD) schools' seventh and eighth grade program of exploratory foreign language. Topics presented include: administrative and instructional policy statements; course overview; notes on concepts, skills, and content; timetables for fall and spring semester courses; rationale and goals; student performance and exploratory objectives; language and culture content; anticipated contribution to English and other academic skills; a diagram of the exploratory concept for the teacher's reference; basic lesson format; methodological strategies; instructional reminders and homework suggestions; suggested instructional materials; notes on student evaluation; linguistic/cultural pre- and post-tests; a pupil opinion survey and end-of-course survey; a general language textbook inventory; notes on computer applications; illustrations for introducing the concept of Latin roots; and objectives for the eighth grade sequential program. (MSE)

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FOREIGN LANGUAGES - MIDDLE SCHOOL

EXPLORATORY FOREIGN LANGUAGE

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FOREIGN LANGUAGES - MIDDLE SCHOOL

TABLE OF CONTENTS

	Page
Policy Statement	1
Instructional Statement	1
Exploratory Overview	2
Concepts, Skills, Content	3
Semester Course Model	5
Timetable	5,6
Fall Semester	6
Spring Semester	7
Rationale/Goals	8
Student Performance Objectives	9
Exploratory Objectives	11
Content of Course	12
Content of Course	12,15
Linguistic Categories	14
Over-Riding English Skills	16
Exploratory Concept for Teachers	17
Basic Lesson Format	18
Methodology	19
Instructional Reminders	21
Basic Sources of Instruction	25
Evaluation	31
Pre-test on Linguistic Concepts	32
Post-test on Linguistic Concepts	33
Pupil Opinion Survey	34
End-of-Course Survey Test	35
Textbook Inventory of General Language	38
Exploring Computers and Their Languages	39
Latin Roots - SAMPLE DRAWINGS	49
SEQUENTIAL PROGRAM - 8th Gr. Level I: Objectives	54

FOREIGN LANGUAGES - MIDDLE SCHOOL

Policy Statement

The foreign language program for the middle school is as follows:

Grade 7 - One semester of the Exploratory course offered to TAG and selected ability level 1 students.

Grade 8 - (1) TAG and selected ability level 1 students will take level I of the sequential French and/or Spanish program.

(2) Ability levels 1, 2 and selected 5/6 level students (SLRD) will take a semester of Exploratory language.

NOTE: A first-year middle school may include classes of continuing French and/or Spanish classes comprised of 8th graders who began sequential program as 7th graders the previous year in the junior high school.

Instructional Statement

The sequential foreign language program of the middle school is the equivalent of level I throughout the system. The methods and materials are similar to those in use in the ongoing junior high school level I program. The entire Level I course is to be covered. (The practice of covering half the level in grade 8 and half in grade 9 has been discontinued as of 1980/81.)

The Exploratory course has been modified in the following ways for middle school:

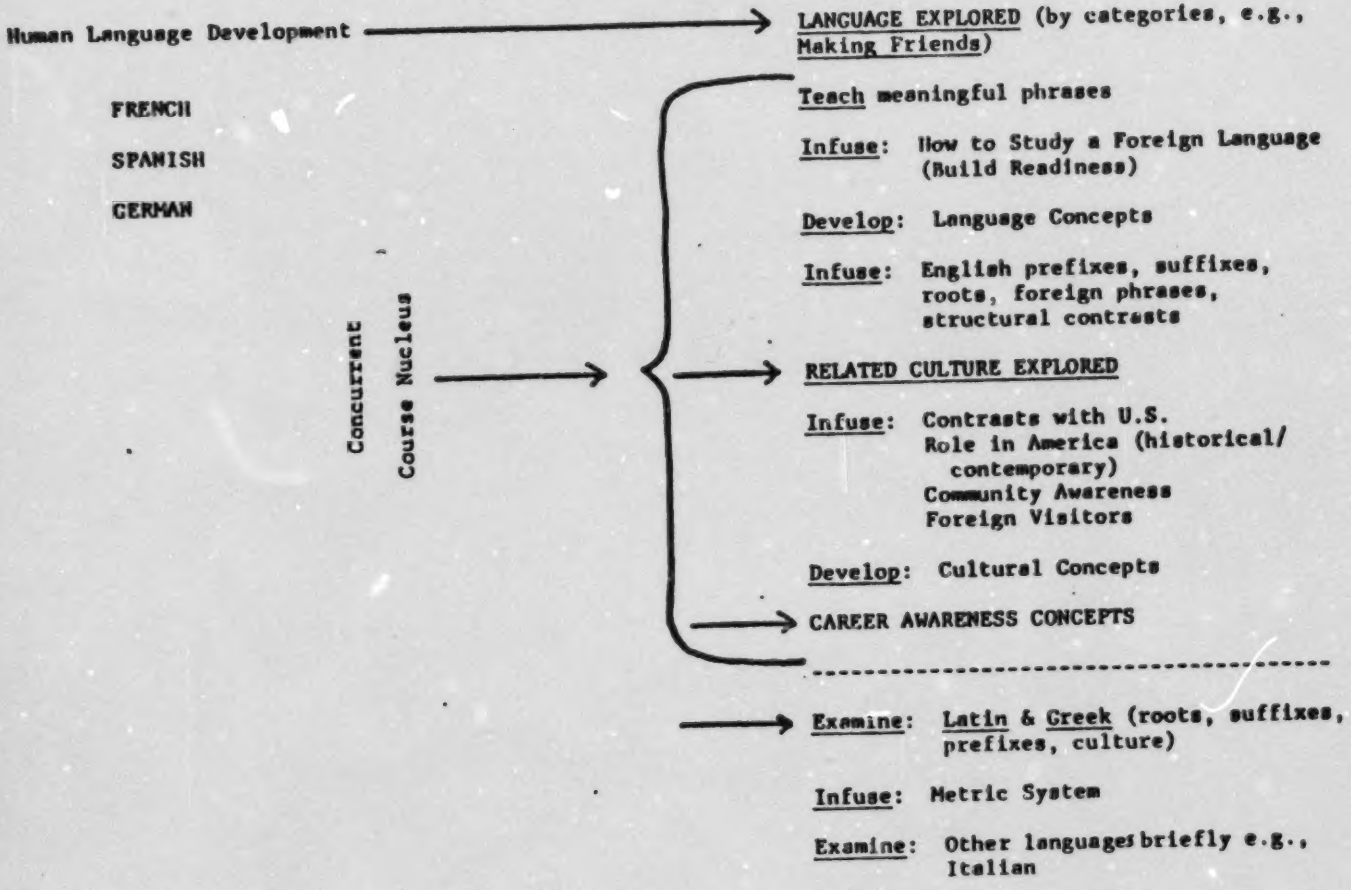
1. Although content, methods, and materials are the same, the course has been consolidated into a semester format for both grades 7 and 8.

2. Exploratory - grade 7 is to be linguistically more sophisticated, with greater emphasis on intellectual activities, in order to challenge the highly able pupils, as indicated in policy statement.

3. The 7th and 8th grade semester Exploratory course can be taught during either or both semesters depending on the number of students to be accommodated.

Description of Exploratory Foreign Language Middle School model is provided on the following pages, followed by instructional objectives for level I in the eighth grade sequential program.

FOREIGN LANGUAGE EXPLORATORY OVERVIEW


Human Language Development
LANGUAGE EXPLORED (by categories, e.g., Making Friends)
FRENCH
SPANISH
GERMAN
Concurrent Course Nucleus
Teach meaningful phrases
Infuse: How to Study a Foreign Language (Build Readiness)
Develop: Language Concepts
Infuse: English prefixes, suffixes, roots, foreign phrases, structural contrasts
RELATED CULTURE EXPLORED
Infuse: Contrasts with U.S.
Role in America (historical/ contemporary)
Community Awareness
Foreign Visitors
Develop: Cultural Concepts
CAREER AWARENESS CONCEPTS
Examine: Latin & Greek (roots, suffixes, prefixes, culture)
Infuse: Metric System
Examine: Other languages briefly e.g., Italian

CONCEPTS, SKILLS, CONTENT
of
Foreign Language Exploratory

Grade level: 7 and/or 8 - Junior high or middle school

Major Concepts, Skills, Content

. . . developed through exploration of French, German, Spanish, Latin, Greek, with minor emphasis on other languages.

CONCEPTS

General Language:

- Language as communication
- Language families
- Development of language
- Signs and symbols
- Nonverbal communication
- Language as sound system
- Sound, word order, work form and meaning
- Beginning awareness of speech patterns
- Foreign language elements in English

Culture:

- Way-of-life in other cultures
- Civilization (great achievements of each culture)
- Cross-cultural contrasts
- Contributions to America

Career Education:

- Foreign languages and world of work

SKILLS

- Speaking (limited, specific French, Spanish, German phrases)
- Understanding these expressions when heard
- Reading recognition of phrases, public signs
- Copying foreign words correctly
- Spelling accurately names of persons and places taught
- Recognizing French, Spanish, German by appearance
- Learning about foreign language study skills, e.g., memorizing, listening
- English Skills Connection:
  - Cognates, derivatives, borrowed foreign words
  - Prefixes, roots, suffixes (Latin and Greek)
  - Dictionary skills related to above
  - Word ancestry
  - Comparison of structure

(Continued)

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CONTENT (Highlights)

- Names of world's major languages
- Meanings of common roots, prefixes, suffixes
- Body of French/Spanish survival expressions (also German in some schools)
- Meanings of specific borrowed words
- Surface characteristics of contrasts among French, Spanish, German
- A number of different alphabets at recognition level
- Pre-level I awareness of structure, syntax, vocabulary
- Introductory cultural facts:
  France, French Canada, Caribbean, West Africa,
  Spain, Mexico, Puerto Rico, Latin America,
  West Germany, Austria, Switzerland, French,
  German, Hispanic cultures in U.S.A.
  Other languages and cultures of interest, e.g., Italian, Russian
- Occupations enhanced by or requiring foreign language skills

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THE MIDDLE SCHOOL SEMESTER COURSE MODEL

Foreign Language Exploratory (FLEX)

The Exploratory course has been modified to a semester format to accommodate the middle school plan. The year long course (junior high school model) and the semester course (middle school model) will co-exist until the conversion to middle schools is completed. The nature of the modification in relation to course components and timetable are outlined below. The course is to be taught by one teacher who knows both French and Spanish.*

1. The basic course components as stated in guide, Foreign Language Exploratory, pages 5 and 16 are retained and telescoped into a semester time frame:

   - general language (attendant English skills)
   - specific languages (formal exploration of French and Spanish)
   - culture study as related to the languages explored
   - career development
   - community service i.e., awareness of foreign visitors and immigrants

2. Possible administrative patterns:

   Exploratory 7 - Fall or Spring
   Exploratory 8 - Fall or Spring

TIMETABLE FOR STATED COMPONENTS

A Exploratory 7 - Fall Semester (Use all chapters of General Language)

. Beginning of school - Second week of November

PHASE I — General Language text: Chapters 1 through 7
Exploring Spanish: Chapter 10 - also see guide
(Each Exploratory semester course should begin with Spanish exploration)

INTERIM — . International Week - Second week of November

Informal exploration of:

Russian/Polish - Chapters 15/16 - General Language
Oriental languages - Chapter 18 - " "
Artificial languages - Chapter 8 - " "

* Where necessary. two teachers may teach the course, one a French and one a Spanish teacher. The timing of the components should be planned by the teachers and administration beforehand in such a case.

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Arabic - Chapter 17 - General Language
Italian - Chapter 13 - " "
Computer languages (See this guide)

(With use of community and school resources; with individual and small group project approach)

PHASE II . Third week of November - end of January

Exploring French - Chapter 11 - also see guide

PHASE III . Final week of semester

Exploring German - Chapter 9 - General Language
(Invite local senior high German teacher to class)
Completion of Latin chapter (12)
Completion of Greek chapter (14)

ADDITIONAL REQUIREMENTS

First week of semester:

- Pre-test on Concepts (included in this document) -Teacher keeps on file
- Communication to parents regarding nature of course

Final week of semester:

- Post-test on Concepts*
- End-of-Course Survey Test
- Pupil Opinion Survey
- Informal Parent Survey

NOTE: The first three items listed above are included in this document.

Infused throughout semester:

1) . Latin and Greek roots, prefixes, suffixes
   . English derivatives from Greek, Latin, French, Spanish, German (See General Language)
   . English borrowed words

2) Career education 3) Metric system

Required of pupils:

- Notebook
- Cultural or language project for French and Spanish
- Career education project

*Pupils should compare responses with pre-test.

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TIMETABLE - Continued

Exploratory 7 - Spring Semester*

Similar to fall semester with following time frame:

PHASE I - First week of February-first week of April
INTERIM WEEK - Second or third week of April
PHASE II - Third week of April-first week of June
PHASE III -Second week of June

(Additional requirements similar to fall semester)

B Exploratory 8

Timetable to be followed for the 8th grade Exploratory course is approximately that of the 7th grade course with the following exceptions:

- General Language text: Chapters 1, 2, 6, and 7 to be covered, with Chapter 8 if possible
- Phases I-III to be included without Interim Week

Exploratory 7 should be a more sophisticated course linguistically, with more intellectually challenging activities, in order to meet the needs of the academically able students who will comprise most of the enrollment in this course.

Exploratory 8 will include a more heterogeneous grouping of pupils, thus more closely resembling the junior high school course in emphasis and in need to address a wider range of abilities.

* Begin 2nd semester exploratory course with French instead of Spanish. Since first semester exploratory course ends with French component, this plan facilitates teacher use of materials.

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EXPLORATORY FOREIGN LANGUAGE - MORE THAN 'MAINSTREAM CHIC'

Rationale and Goals
for
Exploratory-Course-which-Combines-General Language-
and-Foreign Language-Sampling

READINESS for Classroom Foreign Language Study

Most elementary school children have no foreign language experiences; consequently, many pupils of middle school age are not prepared to cope with the exigencies of level I; the exploratory experience develops readiness for language study.

LINGUISTIC/CULTURAL AWARENESS

The exploratory course may represent the only exposure to other languages and cultures for those pupils who will never study a foreign language sequentially.

NATIVE LANGUAGE SKILLS CONNECTIONS

The course contributes to the pupils' general education, and provides another dimension in English skill development.

PERSONAL DEV./DECISION MAKING
CAREER AWARENESS - HANDS-ON

Having been exposed to several languages, the pupil is better equipped to make a reasoned decision concerning formal language study. The course is in harmony with exploratory philosophy of middle school level and awareness phase of career education.

GOALS

COGNITIVE/PSYCHOMOTOR

- nature and history of language
- limited skills in specific languages
- foreign elements of English
- specific cultures - incl. U.S.A.
- language learning process
- languages - world of work

AFFECTIVE

Positive Attitudes:
- other cultures
- other tongues
- language study
- work
- U.S.A.-heritage
- service

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Student Performance Objectives - Linguistic Skills; General Language/Concepts

For each language formally sampled: French and Spanish; plus German in some schools. The linguistic skills objectives do not apply to other languages which the class or individuals may investigate.

(References: Bloom, 1956, pp. 26; 206; Foreign Language Exploratory pp. 10-14; Valette, 1972, pp. 9-26)

LINGUISTIC SKILLS

Upon completion of the exploratory course the pupil should be able to:

- say with understanding a specifically designated group of utterances taught for active control
- understand these utterances when heard or seen
- understand when heard or seen: a wider group of expressions taught for recognition only;
  - reading recognition only: (without aural comprehension) road signs, posters, public signs, geographic names
- write in the form of copying foreign samples accurately; spell accurately names of persons and places taught

GENERAL LANGUAGE/CONCEPTS

- relate each language explored to English
- give meaning of some of the most common Latin and Greek roots and affixes in English words.
- discuss, within their level of sophistication, history of language; language families
- recognize some common foreign words and phrases used in English
- recognize some basic differences among languages explored

pre-Level I Concepts

- demonstrate understanding of the following basic concepts about language:
  language - a system of sounds
  - has form and function
  - position, inflection, intonation - may affect meaning
- demonstrate understanding of such foreign language learning tasks as: careful listening
  memorizing
  careful copying
  imitating and repeating

Student Performance Objectives - Cultural Component; Career Awareness

(References: Bloom, 1964, pp. 176; 181; Hoyt, 1974, pp. 31-32; Foreign Language Exploratory

CULTURAL OBJECTIVES

Upon completion of exploratory course pupils should be able to:

- demonstrate awareness of contrasts and similarities among the different foreign cultures explored as well as between each foreign culture and the United States, to the extent that this information was part of the course.

- demonstrate a knowledge of the geography, historical highlights, social customs and the world of work of the peoples whose languages were explored; their contribution to the development of the United States, to the extent taught.

  The teacher predetermines with the class the degree of expectation with regard to items one and two, based on the specific content studied. Pupils should be held responsible only for material previously agreed upon as meriting their active retention.

- reflect an attitude of appreciation toward foreign cultures, as expressed in class discussions, and in behavior toward classmates and adults from other cultures.

CAREER AWARENESS

Upon completion of this course the pupils should have:

- examined at least one of the 15 occupational clusters (Hoyt, 1974, pp. 31-32) as it relates to one of the languages explored.

- submitted a project demonstrating the above relationship.

- acquired some knowledge of possible relationships of foreign language skills to a variety of occupations, demonstrated through discussion and tests.

- raised their level of decision making skills through exploration of a new discipline, with possible future career implications.

Exploratory objectives to be sent to parents by teacher beginning of semester

Title of Course - Foreign Languages

Foreign Language Exploratory

Description

This course introduces jr/middle school pupils to foreign cultures and to a number of basic foreign language phrases and expressions. The main languages and cultures explored are French and Spanish, with a shorter exposure to German, Latin, and Greek. The relationship of English to all the above languages and to others is studied through roots, prefixes, suffixes, related and borrowed words. Pupils are introduced to world language families, to theories of possible origins of language, and to the idea of cultural contrasts. Through this exploratory experience pupils learn about foreign language study skills and discover which foreign language and culture may interest them for future formal study, if any.

Objectives -

This foreign language course is designed to teach students to:

- recognize at least French, German, and Spanish words by their appearance.
- speak with understanding, phrases in the above languages which have been taught for active use.
- understand when heard or read the meaning of phrases which have been taught for comprehension only.
- recognize the more common public signs of the foreign culture: road signs, posters, commercial establishments, etc.
- copy French, German or Spanish words accurately, spelling correctly from memory names of foreign persons and places taught.
- give the meaning of the most frequent Latin and Greek roots and prefixes in English words and of common English words borrowed from or related to French, German, or Spanish.
- name the languages of the Indo-European family.
- show awareness of different cultures and their contributions to our country.
- apply foreign language study skills, such as memorizing and concentrated listening.

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Type of Content. Pupils are to achieve performance aims through the following representative content. The Curricular Components, organized under the themes of language, culture, and career development, are telescoped below. (Berlitz, 1970; Lindquist, 1968, pp. 3-143; Love and Honig, 1973, pp. 49-55; Foreign Language Exploratory

CONTENT OF EXPLORATORY COURSE

LANGUAGE

General

Communication: Development of language - Signs and Symbols - Development of Writing - Language Families

English: Dictionary Skills - Latin and Greek elements (roots, affixes - derivatives - Cognates--borrowed words); history of English (Lindquist, 1968, pp. 45-61; 108-132)

Latin and Greek: Role in development of modern English; Latin and Greek in today's English (Lindquist, 1968, pp. 232-251; 271-297)

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LANGUAGE

Specifics

Required: French - Spanish
Optional: German
Informal treatment: Russian, Italian; others according to individual or class interest

For every language formally explored over a period of time:

Language categories - phrases - expressions to say and/or recognize

Making Friends	Sports	Cars and Driving
Time and Numbers	Shopping	Holidays and Festivals
Travel	Services	Words and Expressions Used in English
Dining		

(See page 14 for consolidation of categories)

Relationship of the language to English - cognates - borrowed words - comparisons of structure

Comparison with other foreign languages

A body of information about the language, intended to build awareness of structure, syntax; pre-Level I concepts; guidance in "how to study a foreign language."

Pre-Level I Concepts: Term coined by the writer to designate heightened awareness of syntax, gender, agreement, sound and meaning; position and meaning; --understandings which impart readiness for study of a language other than one's own.

CONSOLIDATION OF LINGUISTIC CATEGORIES

The Linguistic Categories in the Foreign Language Exploratory Guide, also appearing on the preceding page, have been combined into clusters for more efficient planning in both the junior high and middle school course model.

The Linguistic Categories are the sources for the foreign language phrases to be taught and for the cultural material to be learned. See guide on pages 25-35 for French categories, and pages 67-80 for Spanish categories.

The cluster combinations follow.

CLUSTER I

Making Friends - Remains as a separate entity because of its importance as a beginning.

CLUSTER II

Travel, Cars & Driving, Time & Numbers, Shopping & Services

CLUSTER III

Dining & Food Concepts in Cultures

CLUSTER IV

Holidays/Festivals and Sports

Ongoing:

A. English Connection - each cluster
B. Career Education infused in each cluster
C. Latin & Greek (prefixes, suffixes, roots, borrowed words) infused
D. Metric

CLUSTERS I-IV

For French: Work through the clusters while studying France, French Canada, Caribbean, Africa (Total Class)

For Spanish: Work through the clusters while studying Spain, Mexico, Puerto Rico (Total Class)

Special Projects for Individuals Can Include:

1) Other French-speaking areas, i.e., Tahiti, Belgium, etc.
2) Latin American countries
3) East Germany
4) Language minorities in U.S.: Hispanic, Haitian

CONTENT OF EXPLORATORY COURSE (Cont'd.)

CULTURE

Some aspects of both formal and deep culture are treated in the course, formal referring to the best achievements of the society in question; geography, history, etc.; and deep referring to the total way of life of a people, in the anthropological sense (Brooks, 1966, p. 4; Valette, 1972, pp. 199-206)

World Areas in Focus

Required — French: France, Canada, Caribbean, West Africa
Spanish: Spain, Mexico, Puerto Rico

Optional — German: West Germany, Austria, Switzerland
Others, e.g., Belgium, South America - class or individual interest

Representative Cultural Units (correlated with language categories)

- Cities in Contrast - New Orleans - Montreal - Paris
  San Juan - Madrid - Mexico City
- Peoples and Places - Biography and Geography
- Foods and Cooking
- The Arts
  - ...music and composers
  - ...paintings and painters
  - ...children's theatre
  - ...songs
- Sports
- Holidays and Festivals
- Family Names
- Folklore and Legends
- French, German, Hispanic Cultures in the United States
  Historical and Contemporary (Three separate units)
- The Puerto Rico - United States Relationship

(Foreign Language Exploratory pp. 37-40; 58-61; 82-88)

OVER-RIDING ENGLISH SKILLS

1. In addition to the language and reading skills (both general, and specific, to the foreign language), the Exploratory course is to contribute to the overall skills of the junior high or middle school student. Examples given below:

   a. Library Skills (Research)
      Use of: Card Catalog
      Readers' Guide to Periodicals
      Encyclopedias (including specialized)
      Vertical file
      Dewey Decimal System
      Unabridged dictionary
      Information almanac

   b. Study Skills (Research)
      Skimming
      Getting gist of paragraph
      Taking notes from reading
      Use of index and table of contents
      Organizing information

   c. Writing Skills
      Writing paragraphs
      Spelling
      Outlining
      Preparing written reports
      Summarizing

   d. Aural/Oral English Skills
      Discussion
      Reporting
      Listening/speaking

2. "English Connections" Sources:
   Latin Packet for Teachers; General Language Text; French Place Names in U.S.; Dictionaries showing derivations; Guide - p.126 (Maryland map with place names which are French, Spanish, German); p. 128-133; Word Ancestry (booklet); Word Origins and Their Romantic Stories (on order)
   NOTE: Students should find out meanings of their given names.
   Source: Webster's Unabridged Dictionary

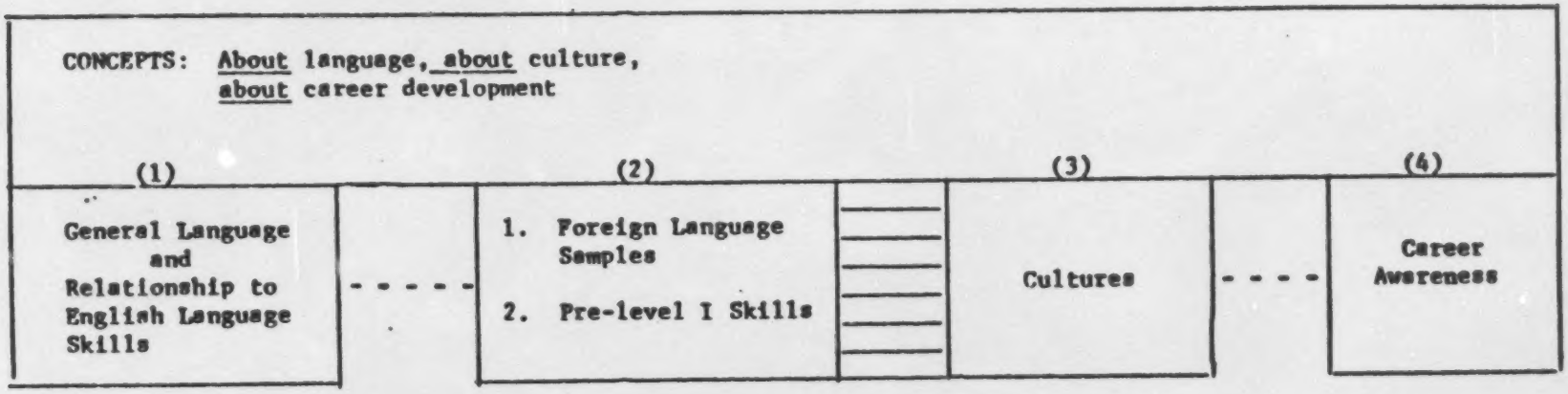
3. Sources of Foreign Language Phrases
   . Travelers books (French for Travelers, etc.)
   . Guide

4. Sources for History of Language, Language Families, etc.
   . General Language text
   . Wall map - Language of the World

5. Sources for Culture Information:
   . Time/Life books
   . National Geographic (school library)
   . People of the World - Mexico, France
   . filmstrips
   . MacDonald books on countries
   . Readings on History and Culture of Puerto Rico
   . Viva-Mexican Americans
   . Travelers books
   . etc.

METHODOLOGY

EXPLORATORY CONCEPT FOR TEACHERS



1. Every day in some manner something from each box should be included in the teacher's plan.
2. Samples and Cultures boxes are more closely connected in the drawing because the culture studied emanates from the language being sampled.

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FOREIGN LANGUAGE EXPLORATORY

BASIC LESSON FORMAT

I. Practicing

Words, phrases, building dialog
Speaking, reading, copying
Presentation of short dialog by pupils — 15 min.
The English connection (must not be omitted)

II. In-between part of period -

.Work on: Projects
.Give: reports, dramatizations
.Reading lesson: text: General Language — 25-30 min.
.Class discussion: teacher or student led
.Outside speaker
."Contract" projects
.Testing
.Assign Homework

III. Set plans
Evaluate work period - Ask students what has been accomplished — 5 min.
Quick review.phrases practiced earlier

METHODOLOGY

A Few Planning Strategies for the Exploratory Course

It is important that the teacher adopt the following basic concept of the Exploratory class period.

1. **Foreign Language Practice** (10-15 min. MAXIMUM)

↓

English connection (Required each day)

2. Use of General Language text - Directed reading
PROJECT WORK
(Groups or individual contract)
Pupil Reports, Skits
DISCUSSIONS
Cultural or language quiz or test
(25-30 min.)

3. Discussion about work accomplished
Set plans - Assign homework
Quick review of day's foreign language expressions
Songs, Vocabulary game, etc.
(3-5 min.)

Segment #1 of Class Period

To teach more and more of the foreign language during the class period is not acceptable in this course. Learning the foreign language per se is a secondary goal to the development of language and cultural concepts. Teachers should concentrate on the development of pre-level I readiness.

Each day should contribute in some way to the pupils' knowledge of English vocabulary. This could involve one or two words taken from the phrases practiced, analyzed to show their origins, pointing out an English derivative, cognate, a borrowed, or a related word. It could be a place name in the United States. The teacher will have to do some background work if he/she feels a lack of knowledge in this area. (General Language text is helpful.)

Should the expressions of the day appear non-relatable to English, the teacher might establish a "mystery word" for the day, which pupils are to look up to determine its origin. (Use Latin packet as a source also.) There are levels of investigation which "word scouts or detectives" can pursue. For example, the Spanish word amigo may be related to the English amiable, which actually can be traced to the Latin word amo, amare - to love. Such information is to be found in the dictionary.

The more able students in the class should be challenged with linguistic tasks of this nature in addition to those of a cultural nature.

Segment #2 of the Class Period

This may be the most difficult part of the period for which to plan. Since pupils may be working in groups or independently at times, standards and procedures for operating should be set with the class. Since SOME PUPILS FINISH TASKS BEFORE OTHERS, TEACHER SHOULD HAVE SPECIFIC SUGGESTIONS AS TO WHAT ACTIVITTIES THESE PUPILS MAY ENGAGE IN. Of course, materials should be available in the room for a variety of possibilities.

During some days teacher should conduct a directed reading lesson using General Language text. (Twice a week.)

Segment #3 of Class Period

When class has engaged in group work on projects or contracts, it is important that before the period ends the teacher bring the pupils together for a quick overview of what they have accomplished, and to end the period by going over some of the expressions practiced during Segment #1. Homework should be assigned before expressions are reviewed.

Teaching songs in the foreign language is highly recommended both for language and cultural reasons.

Instructional Reminders for Exploratory

1. Discuss plan with students - give some assignments by the week, some by the day, some longer range.

2. Adjust projects to semester format for middle school.

3. Homework - at least three times a week.

4. Pupils should have tasks to do at all times in the class, and they should know why they are doing a given task.

5. Quizzes should be given approximately three times per week. A very short daily quiz would not be out of order. Check immediately in class for feedback to pupils. Quiz may be on phrases, cultural material, material read in General Language, or Travelers booklets, or on metric items previously discussed, or career education concepts.

6. Use of Filmstrips:

   Filmstrips need not always be shown to entire class. Small group working on a particular project might use a filmstrip themselves as a source of information - for this purpose use previewers. (If not in department, check with Media Center).

7. CAREER EDUCATION

   Examine Career Education Guide for possible application to this course. Special notice: The writers of the guide devoted the first section to suggested awareness activities for elementary, junior and senior high levels. Utilize both elementary and junior high suggestions.

8. Things to do and make - Encourage pupils to make things concerning daily activities which can serve as topics for discussion and language development.

9. Insist on originality in presentation of report to class:
   e.g., simulated radio or TV programs
   "famous professor" lecturing
   Use of filmstrips or slides

10. Set standards with class for reports, oral and written.

Multidisciplinary Aspects:

11. Work with home economics, core, English, art and music departments. Examples: (If art teacher is highly familiar with French or Mexican art, have him/her come into class one day for a discussion).

(Music teacher may cooperate with you in teaching Exploratory class to sing a particular foreign song).

Work with math department in helping to impart metric skills.

Work with science department; pupils find out the contributions of a particular culture to science and industry, e.g., Pasteur. Of course, working with English is a basic part of the course.

12. Grading standards are the same as for other subjects except for pronunciation of foreign language. Consult Exploratory Guide for the latter.

13. Accumulate room library of materials.

14. Train students to consult derivative section of dictionary when they look up a word.

15. Word history projects are as acceptable as cultural projects. This means choosing a word such as candidate, tracing its origins in ancient Rome and explaining its meaning today. Five or six such words which have a rich derivational history might constitute a project.

* * *

SUGGESTIONS FOR HOMEWORK

1) It is understood that pupils work on their projects both in class and at home.

2) Daily type of homework assignments might be:

.Copying phrases
.Practicing writing phrases correctly several times
.Listening to evening news and making list of all foreign names heard
.Working on outline maps
.Filling in blanks with phrases learned. (Choose from list provided)
.Variety of worksheets, such as:
  a. culture questions to look up
  b. choose from list of phrases provided on the sheet:
     the phrase (or word) which means_____
     the phrase (or word) which means_____
  c. Crossword puzzle worksheet (can include English words as well as foreign words learned).
  d. Finding answers to a list of questions using General Language text.
.Follow suggestions in General Language Teacher's Manual.

.Prepare a page for "picture dictionary" by looking up set of words in dictionary - include word history information as found in dictionary. Illustrate the words.
.Make a travel poster using signs or phrases learned.
.Pupils find out about country of their own ancestors.
.Look through magazines and newspapers - make list of foreign words encountered. The following day teacher should spend part of the period going over these words and helping pupils identify the language(s).
."Find-out-why" game, such as:

-find out why there are so many Spanish names in the Southwest.

-find out why the term "love" is used in tennis. (see Career Education Guide, page 12)

-find out why metric system is so named (Greek origin of word to measure)

.Give an occupation name each day - pupils are to write paragraph, including how such an occupation might relate to foreign language
.Assign each pupil a phrase to be illustrated. (In the beginning the same phrase can be assigned to several pupils). These can be word posters.
.Illustrate unit of metric system using French, German, or Spanish term.

Things to Do and Make

Cultural

.team dialogues
.cultural skits
.recognition games, report, panels/field trips/
.make:dioramas
.packets
.drawings with labels
.cultural and language booklets
.charts
.cooking activities
.tasting activities
.flour, salt, water maps
.menus
.school-wide projects
.showcase displays
.cartoons
.metric materials - charts
.teaching aids (made by students), such as clocks
.puppets

Language Activities

.making flashcards for vocabulary/ structure
.crossword puzzles-some teacher-made; others student-made
.collages (using vocabulary & phrases)
.pairing off-practicing the language
.posters illustrating words
.cognate charts
.matching phrases with pictures
.picture dictionary of foreign language vocabulary
.word recognition signs
.symbols charts - See text, General Language & Manual
.derivative illustrations, e.g., a tree showing Latin root word & English "branch" words

Basic Sources of Instruction

The specific materials listed herein are those which comprise the basic core of the program and which are supplied to each of the participating schools. In addition to providing basic content for the pupils, some of the materials are useful as sources of information for teachers whose knowledge about language is limited to their own specialty.

For General Language Development

Text: General Language: English and Its Foreign Relations
Lilly Lindquist and Clarence Wachner
(with teacher's manual) One copy per pupil
Holt, Rinehart, Winston (1968)
383 Madison Avenue
New York, New York 10017

Filmstrips/discs: Linguistic Backgrounds of English
Society for Visual Education (1970)
1345 Diversey Parkway
Chicago, Illinois 60614

Speaking of Language
Guidance Associates (1971)
757 Third Avenue
New York, New York 10017

Posters/Charts: "Derivative tree," Latin and Greek elements
American Classical League Service Bureau
Miami University
Oxford, Ohio 45056

Wall map: Languages of the World
Denoyer-Geppert (1973)
5235 Ravenswood Avenue
Chicago, Illinois 60640

Metric: Metric System Charts
David C. Cook (1973)
School Products Division
Elgin, Illinois 60120 (Classroom set)
(Role of the Latin and Greek prefixes in the metric system vocabulary)

For Specific Languages and Cultures (French, Spanish, German)

Texts: French for Travelers
also Spanish and German
Macmillan Publishing Company (1970)
Front and Brown Streets
Riverside, New Jersey 08075 One copy per pupil

People of the World Series
France
Mexico
Scott, Foresman and Company (1975)
1900 East Lake Avenue
Glenview, Illinois 60025
Classroom sets

Filmstrips/discs/tapes: Berlitz-Pathescope Travel Series
French, Spanish, German } Set #1
Pathescope Industrial Media
71 Weyman Avenue
New Rochelle, New York 10802

Passport to Mexico
EMC Corporation (1977)
180 East Sixth Street
Saint Paul, Minnesota 55101

People of the Caribbean
Learning Arts (1970)
P. O. Box 917
Wichita, Kansas 67201

Puerto Rico and the Puerto Ricans
Learning Arts, 1970
(see above)

Un Viaje por Mexico (A Trip through Mexico)
Holt, Rinehart, Winston
383 Madison Avenue
New York, New York 10017
(1970)

Voici la France (Here is France)
Holt, Rinehart, Winston (1970)
(see above)

Why Study Foreign Languages?
New York State Association of Foreign Language Teachers (1975)
1102 Ardsley Road
Schnectady, New York 12308

Why Study French?
American Association of Teachers of French (1972)
59 East Armory Avenue
Champaign, Illinois 61820

Why Study German?
AATG Service Center (1974)
339 Walnut Street
Philadelphia, Pennsylvania 19106
(In senior highs with German program)

Wall maps: (with foreign language text)
France
Quebec
Spain, Portugal
World and World Languages
West Germany
Caribbean Area
South America
Mexico
Denoyer Geppert
5235 Ravenswood Avenue
Chicago, Illinois 60640
(Also desk size maps; globes)

Student Newspapers: Bonjour, Qué Tal, das Rad
Scholastic Foreign Language Services
902 Sylvan Avenue
Englewood Cliffs, New Jersey 07632
(class sets)

Travel and Culture Guides: (Latest editions)

France, Spain, Caribbean, Mexico, South America, Canada (Fodor)
David McKay Company
750 Third Avenue
New York, New York 10018
(Several copies per school)

Culture Capsules and Contrasts: Proceedings of the Conference on Culture
American Council on Teaching Foreign Languages (1971)
2 Park Avenue
New York, New York 10016
(One copy per teacher)

World Culture Series
USA - Mexico
USA - France
Newbury House Publishers
54 Warehouse Lane
Rowley, Massachusetts 01969
(One copy per school)

French Teenager
Spanish Teenager
German Teenager
American Language Teacher (1973)
Box 07300
Detroit, Michigan 48207

Living in Puerto Rico
Poster size pictures plus manual
Silver Burdette Company (1977)
Morristown, New Jersey 07960
(One per school)

Cultural History and Geography: (Latest editions)

McDonald Countries
France
Spain
West Germany
Canada
Mexico (several per school)
Silver Burdette Company - (See above)

Readings on History and Culture of Puerto Rico
Continental Press
Elizabethtown, Pennsylvania 47022

Viva - Famous Mexican Americans
Steck-Vaugh Company
Box 2023
Austin, Georgia

Foods and Cooking: (Latest editions) Time Life Series
Spain/Portugal
Latin America
Caribbean Isles
France
Africa
Germany
Switzerland
Austria
Silver Burdette Company
Morristown, New Jersey 07960

For Career Development

Awareness and Exploration: Foreign Language Careers
Vocational Guidance
620 South Fifth Street
Louisville, Kentucky 40202
(1975)

Foreign Languages in Careers
New York State Association of
Foreign Language Teachers (1977)
1102 Ardsley Road
Schnectady, New York 12308
(One per school)

Occupation Flashcards
French, Spanish, German
Wible Language Institute
24 South Eighth Street
Allentown, Pennsylvania 18105 (1974)
(One set per school)

Que Ferai-je Plus Tard? (What will I do later?)

Dime cuál será mi profesión
(Tell me what my work will be)
Gessler Publishing Company
220 East 23rd Street
New York, New York 10010
(One each per school)

Music: Spanish American Music and Its Roots
Text and disc
Silver Burdette Company (1974)
(One per school)

Other Teacher Materials

Career Education and Foreign Languages
Prince George's County Schools (1974)

Foreign Language Exploratory
Resource guide and handbook
Prince George's County Schools (1975)

French Cultural Understanding
Spanish Cultural Understanding
Alameda County Schools (1971)
224 West Winton Avenue
Hayward, California 94544

Latin Curriculum Guide
Prince George's County Schools (1965)

Lingua Latina Mortua Non Est
(Latin is not dead)
Packet for Exploratory Teachers (1977)
Prince George's County Schools

The Miracle of Language. Charlton Laird
Fawcett Publications
Greenwich, Connecticut (1953)

SO IST ES (The Way It Is)
Harcourt, Brace, Jovanovich (1972)
757 Third Avenue
New York, New York 10017

These Strange German Ways
German Information Center
410 Park Avenue
New York, New York 10022

EVALUATION

The same principles of evaluation which have pertained to the junior high school course are applicable in the middle school model. Testing and grading are discussed in the Foreign Language Exploratory Guide on pages 116-119. Sample tests are given on pages 153-176.

The End-of-Course Survey Test, required to be administered by all teachers at the end of each Exploratory course, is included in this document. The required pre- and post-test on concepts are also included.

Continuing Assessment of Course

Pupil Opinion Survey

At the end of each Exploratory course pupils are asked to respond to a ten-question survey. A copy of this survey form is included herein. Teachers are to submit sheet with summarized results to Central Office supervisor.

In addition to the formal survey, teachers are asked to conduct informal evaluative sessions weekly or biweekly during the semester.

Informal parent survey at end of semester is desirable in order to ascertain community response to the Exploratory course concept.

* * * * *

DOCUMENTS TO BE USED WITH STUDENTS

The following documents are to be used with students as indicated in this guide:

Pre-test on Linguistic Concepts
Post-test on Linguistic Concepts
Pupil Opinion Survey
End-of-Course Survey Test
Textbook Inventory of General Language
Exploring Computers and Their Languages

FOR LANGUAGE EXPLORATORY

Pre-test on Linguistic and Cultural Concepts

(Administer first week of semester)

Directions: Based on your knowledge decide whether each of the statements below is true or false. Write T for True or F for False.

_____1. All modern languages keep changing.

_____2. Language is a system of sounds.

_____3. Languages are interchangeable, that is, words in one language are exactly equal to words in another language.

_____4. Languages differ in how they are put together.

_____5. The red ball would be La balle rouge in French.

_____6. The adjective in French usually comes before the noun.

_____7. Breakfast means the same thing in all countries.

_____8. Many English prefixes such as pre, ab, de, tele, come from Latin and Greek.

_____9. English is spoken in exactly the same way throughout the United States, and Spanish is spoken in exactly the same way in all the Hispanic countries.

_____10. Changes in endings of words usually change their meanings.

KEY for the Teacher

1. +	6. -
2. +	7. -
3. -	8. +
4. +	9. -
5. +	10. +

FOR LANGUAGE EXPLORATORY

Post-test on Linguistic and Cultural Concepts

(Administer at end of course. Pupils compare with Pre-tests.)

To the student:

Below are ten statements of some general ideas related to your Exploratory Language course. If you consider the statement correct, place a plus (+) in the small blank in front of the statment; if you consider the statement incorrect, place a minus (-) in the blank.

_____1. **Word order is the same in all languages.**

_____2. **German, French and Spanish belong to the same large branch of human languages called Indo-European.**

_____3. **You can express ideas with and without words.**

_____4. **Geography affects the languages of people.**

_____5. **Bread is the same all over the world.**

_____6. **Languages borrow words and expressions from one another.**

_____7. **Being on time is important to people in all cultures.**

_____8. **You can translate exactly from one language to another.**

_____9. **Different countries have different ideas about what is work and what is play.**

_____10. **English has many Greek and Latin roots.**

KEY for the Teacher

1. -	6. +
2. +	7. -
3. +	8. -
4. +	9. +
5. -	10. +

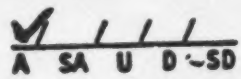
FOREIGN LANGUAGE EXPLORATORY PUPIL OPINION SURVEY

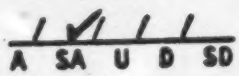
(Administer at end of each semester)

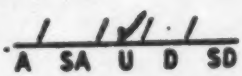
Dear Pupils of the Foreign Language Exploratory Course:

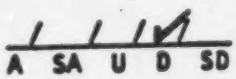
We need to know your opinion about the course. Please check your agreement or disagreement with the sentences given below by following the directions. There is no right or wrong answer, only your own opinion. We thank you for your help. DO NOT SIGN YOUR NAME.

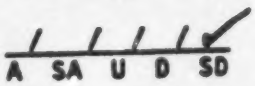
Directions

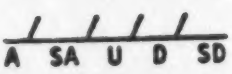
If you Agree - mark 

If you Strongly Agree - mark 

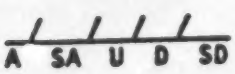
If you are Undecided - mark 

If you Disagree - mark 

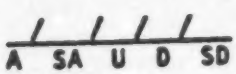
If you Strongly Disagree - mark 



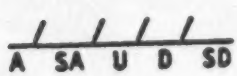
1. I would recommend this course to my friends.



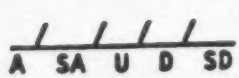
2. This course helped me understand English word meanings better.



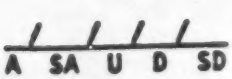
3. This course has helped me decide whether I wish to study a foreign language or not.



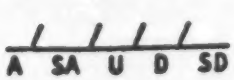
4. I know more about different countries now.



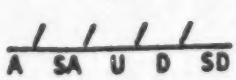
5. This course was not too hard or too easy.



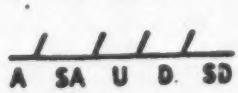
6. My parents are pleased that I have had this course.



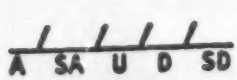
7. I feel I could succeed in a regular foreign language class.



8. I believe a foreign language skill can help a person in some careers.



9. I want to take a foreign language next year.



10. I have learned how to study a foreign language in this course.

A Flexible Model (Required at end of each semester)

Options: (1) Use entire test as is.
(2) Substitute your questions for each of these questions.
(3) Substitute your questions for some; and leave others intact.

Teacher to go over directions with class for each part.

Part A - Cultural Situations - Empathy for other cultures.

Directions: Encircle the best answer for each situation, and write a comment:

1. A Spanish-speaking person does not smile when you are introduced. You are:

   a. upset
   b. not upset
   c. concerned about what you might have done

   Comment:

2. A student comes from Europe to live next door. Would you go and talk to this young person about interests you might have in common?

   a. I'd stay away until asked
   b. I'd call on him or her
   c. I'd ignore him or her

   Comment:

3. You are with a group of boys. In the group is a French boy who says, "I want to play football." Would you:

   a. Attempt to play American football with him?
   b. Explain French football (Soccer) to the students?
   c. Ignore him in order to avoid the problem.

   Comment:

4. You meet a foreign family on the street. They need directions but speak no English. Would you:

   a. Try to help them by gestures, give any words of their language which you might know, etc.
   b. Explain politely that you do not speak their language.
   c. Say, "I'm sorry," and walk away.

   Comment:

5. Your school is having a dance. Would you explain details about clothes, time, chaperones, etc., to your foreign classmate?

   a. Yes
   b. No
   c. Take it for granted that he/she would know all about it.

Comment:

Part B - Language Contrasts*

Directions: In the list below indicate which words you think are French or Spanish by placing an F or S in the blank. If you have not had the word, try "intelligent guessing" by the appearance of the word.

Examples: livre - F
madre - S

1. vaca _____
2. lac _____
3. palais _____
4. façade _____
5. barco _____
6. familia _____
7. estomac _____
8. qualité _____
9. nerveux _____
10. adiós _____

*In groups that have also explored German, substitute one or two German words.

Part C - "English and Its Foreign Relations" (Students should have had Latin & Greek components of course.)

Directions: Encircle the correct meaning of the word that is underlined in the sentence. Then tell what language it is derived from, or what language it is borrowed from.

1. The terrestrial scene was indescribable.

   a. water scene
   b. land scene
   c. frightful scene

Language:_____

2. The Milky Way is a celestial body which extends millions of miles.

   a. heavenly
   b. nightly
   c. daily

Language:_____

3. Her red bolero was embroidered with beads.

   a. a straw hat
   b. a woven dress
   c. a short jacket

Language:_____

4. We like to shop in the delicatessen.

a. food shop
b. corner grocery
c. mall

Language:_____

5. In the building was a large chamber.

a. corridor
b. large room
c. closet

Language:_____

Part D - Language Concepts

Directions: Based on your knowledge decide whether each of the statements below is true or false. Write T for True or F for False.

____1. All modern languages keep changing.

____2. Language is a system of sounds.

____3. Languages are interchangeable, that is words in one language are exactly equal to words in another language.

____4. Languages differ in how they are put together.

____5. The red ball would be La balle rouge in French.

____6. The adjective in French usually comes before the noun.

____7. Breakfast means the same thing in all countries.

____8. Many English prefixes such as pre, ab, de, tele, come from Latin and Greek.

____9. English is spoken in exactly the same way throughout the United States, and Spanish is spoken in exactly the same way in all the Hispanic countries.

___10. Changes in endings of words usually change their meanings.

Part E - Careers

Directions: Write a sentence after each one telling how a person in that occupation might use a foreign language.

1. Librarian:

2. Radio or TV Announcer:

3. Singer:

4. Nurse:

5. Baseball Player:

To the teacher: Orienting pupils to a text, or "walking them through it," is a useful way to help them understand the overall thrust of the book.

Name:_____ Date: _____

Subject: Exploratory Foreign Language Unit: [illegible]tbook Inventory of [illegible]eral Language

1. Title and authors:

2. Part I is about:

   Part II is about:

3. Read the Introduction and briefly state the purpose of the book.

4. Where is the quickest place to look for the pages telling about roots and prefixes from the Greek language?

5. If you looked at the language tree showing Indo-European languages, in which chapter would it be found?

6. Look through the book and state your opinion about the illustrations. Then write down the page number of an illustration which attracted your attention and tell why.

7. How do you use the index?

8. Please read pages 3 and 4. If you come to a word which you do not know, please write that word, or words, on this paper. (Note: There are no right or wrong answers for questions #6 and #7.) Thank you, Gracias, Merci.

V. Zawowi - Thomas Johnson Middle

The paper below will appear in the text, Exploratory Foreign Language Programs: What's New, by Dora F. Kennedy and William De Lorenzo. To be published by Heinle and Heinle, Boston, MA.

EXPLORING COMPUTERS AND THEIR LANGUAGES

(This material is part of the curriculum in the middle school exploratory foreign language course in Prince George's County, Maryland.)

To the Teacher:

Study about computer languages is a legitimate part of an integrated exploratory language experience, as is the brief exposure to artificial languages such as Esperanto.

The accompanying presentation, written for students, can be utilized in implementing the component of the exploratory course which deals with the development of computer awareness and of the concept that languages can be invented to serve a variety of purposes.

Teachers are urged to call on resource persons in the school and community to help provide an introductory experience, and to become familiar with the computer terminal before students are permitted to try it.* Students in a school which does not have a computer or a terminal might nevertheless acquire some insight from the material in this presentation.

In this document pupils are asked to find out the meaning of several computer language names. Here is the key for the teacher. (Pupils may find out by asking programmers they may know, checking with parents, math teacher, etc.)

BASIC - given in document
FORTRAN - Formula Translation
COBOL - Common Business Oriented Language
APL - A Programming Language
PASCAL - Named after French mathematician, Blaise Pascal, (Pupils may investigate this famous French person as part of French Exploratory component.
LOGO - Type of computer learning system, including drawings, developed by Dr. Seymour Papert, Massachusetts Institute of Technology, Department of Research in Education. (Teacher may relate term LOGO to Greek word logos meaning word or thought - thus logic.)

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*To the Reader: A school may have a terminal connected to a central computer via telephone lines, or it may have one or several microcomputers.

LET'S EXPLORE COMPUTERS AND THEIR LANGUAGES

(A FLEX Student Information packet by Dora F. Kennedy)

WHAT IS A COMPUTER?

The computer is an electronic machine that stores and uses information to solve problems. Another word for information is DATA (a Latin word that means "things that are given"). It is in the form of numbers, words, and various other kinds of symbols, and is typed into the computer on a keyboard. It is called input. It must be organized in exact and logical steps.

The word Computer comes from two Latin words: Cum (with) and putare (to think); it has come to mean to count. A computer, then, is a machine that counts. The result of a computer's operations is called output.

Computers are divided into three categories:

Mainframe: This is a very large computer which can fill a room.

Minicomputer: This computer is smaller than the mainframe, but it is usually large enough to fill a wall. Remember the Latin prefix mini? Although mini means very small, minicomputers were so named because of comparison with the large-scale type. They are really not very small.

Microcomputer: The Greek prefix Micro- means very, very small. The microcomputer is about the size of a typewriter or small television set. It is the home or personal computer, and can be used in the classroom.

Some high schools, universities, business, and research companies, may have minicomputers; terminals can be connected to them by telephone. A terminal might have a screen which is the same as in a television set. It is called a Cathode Ray Tube (CRT). Microcomputers also have a screen or CRT. Some terminals print out the information on paper instead of on the screen. These are called print terminals. A printing device can be connected to terminals with a screen, or to microcomputers. This is called a printer, and it gives a printed copy of what appears on the screen. By the way, the screen is also called the video. Did you know that video is pure Latin, meaning "I see."?

WHAT DOES THE COMPUTER DO?

THE COMPUTER CANNOT DECIDE WHAT IT WILL DO, OR WHAT PROBLEM TO SOLVE. IT CANNOT THINK. A PERSON MUST GIVE IT INSTRUCTIONS. A person must be trained to tell a computer what to do. This process of giving the computer instructions is called programming, or writing a program. The person trained to work in this manner is a programmer. All programming for computers is called software. The computer and related equipment are called hardware.

These instructions are recorded on magnetic tapes and/or discs. They are formulated in codes that have been invented especially for computers. The computer can carry out mathematical operations as well as other tasks. Its electronic circuits reduce everything to counting in the binary system - in other words, 0 and 1, off and on. This electrical impulse - off, on - is called a bit. Bit is a word made from binary digit. Eight bits equal a byte, which is the computer's "word." The computer's inner capacity to store information is measured by Kilobytes, usually abbreviated K-bytes. Remember Kilo meaning 1,000?

COUNTING SYSTEMS

In most cases, human beings use a counting system based on tens, or a decimal system. (Decimal - decem is the Latin for 10.) Today's Computers were designed to use the binary system, as we have already mentioned. In this system two is the base instead of ten. (Bi - is a Latin prefix meaning two.) Your mathematics teacher may help you discuss the binary system versus the decimal system.

Example: The number 14 in decimal system form is 4 ones, and 1 ten.
In the binary system it would be 1110.

2	X 2	X 2	X 2 ←	
Sixteens	Eights	Fours	Twos	Ones
	1	1	1	0

BINARY SYSTEM

read up

0 ones)
1 twos) 14 in binary (1110)
1 fours)
1 eights)

NOTE: In the binary system each position to the left of the previous position is multipied by 2. (You know that in the decimal system each position as you move to the left is multiplied by 10.)

Other number systems can be invented such as the one based on twelves which comes down to us in our clocks and other instruments for telling time. You may wish to investigate the origins of that system. This is called the duodecimal system. Why?

WHAT ARE COMPUTER CODES OR LANGUAGES?

The programmer provides the instructions to the computer in certain human codes which the computer reduces to the binary number system inside its electronic circuits. These codes are called computer languages. Several have been invented; new ones are continually being devised, and the old ones are continually being modified. The best known computer languages are:

BASIC
FORTRAN
COBOL
APL
PASCAL
LOGO (A system for student learning through use of the computer)

BASIC stands for Beginners' All-purpose Symbolic Iinstructional Code.

Try to find out the meaning of the other language names listed.

As you are learning in your Exploratory class, all languages are organized within a certain system, whether they are "natural" languages, such as French or Spanish, or whether they have been invented. In programming a computer you should not use parts of different languages; you must stay within the one designated to be used with that computer. Like people some computers "know" only one language; others "know" two or three. One might say that they are bilingual or trilingual. (Find the meanings and derivation of bilingual and trilingual.) The fact is that the large computers have more circuits and can be programmed to use more than one language. They have a larger memory. Even with these computers one must not "mix up" the languages when writing a program.

Most of the smaller computers use some form of BASIC. Some feature LOGO. (Not really a computer language but a system for learning.) The set of rules for using a computer language is called syntax.

Here is an example of a brief program written in BASIC.

(In BASIC, each line of the program must be numbered.*) The computer must be instructed for even the smallest step. Remember, it does not think for itself!)

BASIC LANGUAGE)

```
100 DIM A$(25)
110 A$ ="sample string"
120 PRINT A$
    (The word PRINT tells the computer
    that it should print the material
    that is represented by the symbol.
    In this case the symbol is A$.)
130 A$ ="new sample string"
140 PRINT A$
150 END
```

NOTE: Do not attempt to figure out the meaning of the example above. The purpose is to show what a simple program in the BASIC language looks like.

When the BASIC Command RUN is typed, the computer will print the words sample string and new sample string, as it was instructed to do in lines 120, 130 and 140.

ACCESS

In order to access (get) a program which is in the computer one must know the procedure and code required by that particular computer. This procedure is called "log on". There is also a special code for signing off. This is called "log off." This procedure applies to terminals connected to computers

WORDS TO REMEMBER

access
BASIC
bilingual
binary/decimal
bit
byte
computer
CRT
data
input
log on
log off
output
printer
program
terminal
trilingual
video

Can you tell where these words came from and what they mean?

*The numbering is usually done by 10's so that the programmer can insert other lines between the numbers. For example, between 110 and 120 one can insert lines 111 through 119 if it becomes necessary to add information and instructions in the program.

REFERENCES FOR STUDENTS AND TEACHERS

Computer Literacy (software package) Introduction to Microcomputers.

McGraw-Hill 1980
1221 Avenue of the Americas
New York, N.Y. 10020
(For TRS-80; APPLE II, PET microcomputers)

Teacher use with students

Computers: From Pebbles to Programs

Guidance Associates 1980
Science and Mankind
Communication Park
Box 2000
Mt. Kisco, N.Y. 10549

Filmstrips/Cassettes (teacher use with students)

Learning Time Share BASIC - (For teachers only)

Hewlett-Packard
5303 Stevens Creek Boulevard
Santa Clara, California 95050

Meet the Computer

Dodd, Mead 1977
79 Madison Avenue
New York, New York 10016

Mind Storms

Dr. Seymour Papert

Basic Books 1980
10 East 53rd St.
New York, N.Y. 10022

Story of Computers

Harvey House Publishing Company, 1970
20 Waterside Plaza
New York, New York 10010

Story of Computers

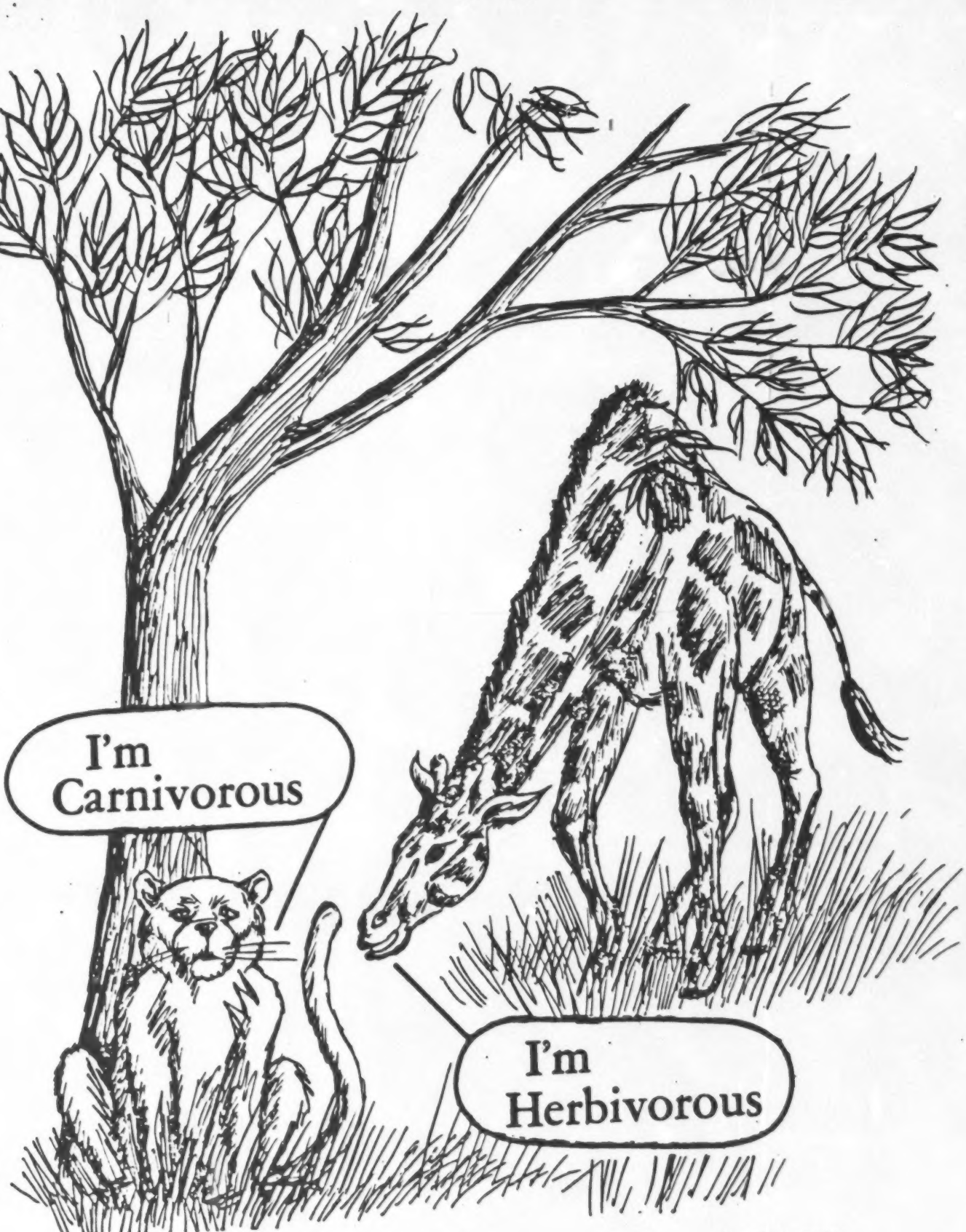
Camelot Publishing Company, 1977
P.O. Box 1357
Ormond Beach, Florida 32074

The Analytical Engine (For teachers and highly able students)

William Morrow & Company
New York, N.Y. 1981

LATIN ROOTS - SAMPLE DRAWINGS

Caveat Emptor


I'm Carnivorous
I'm Herbivorous

IDENTIFY: aural - dental - nasal - ocular - cranial

Latin roots

"Nolo contendere, Pater."